

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Date of Report: 10/10/97

Date Received: 10/09/97

Project: Metro Self Monitor, PO# M58694

Date Samples Extracted: 10/09/97

Date Extracts Analyzed: 10/09/97

**RESULTS FROM THE ANALYSIS OF THE WATER SAMPLE  
FOR CHROMIUM, COPPER, NICKEL, ZINC  
USING METHOD 6010**

**Samples Processed Using Method 3005A**

Results Reported as mg/L (ppm)

<u>Sample ID</u>	<u>Chromium</u>	<u>Copper</u>	<u>Nickel</u>	<u>Zinc</u>
M58694	0.19	0.21	0.15	0.35
Method Blank	<0.05	<0.05	<0.05	<0.05

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**QUALITY ASSURANCE RESULTS FOR  
THE ANALYSIS OF WATER SAMPLES  
FOR TOTAL METALS BY  
INDUCTIVELY COUPLED PLASMA (ICP)  
(METHOD 6010)**

Laboratory Code: 710012-01 (Duplicate)

Analyte:	Reporting Units	Sample Result	Duplicate Result	Relative Percent Difference	Acceptance Criteria
Chromium	mg/L (ppm)	0.34	0.35	3	0-20
Copper	mg/L (ppm)	0.40	0.42	5	0-20
Nickel	mg/L (ppm)	0.40	0.45	12	0-20
Zinc	mg/L (ppm)	0.08	0.09	12a	0-20

Laboratory Code: 710012-01 (Matrix Spike)

Analyte:	Reporting Units	Spike Level	Sample Result	% Recovery MS MSD		Acceptance Criteria	Relative Percent Difference
Chromium	mg/L (ppm)	5	0.34	94	98	80-120	4
Copper	mg/L (ppm)	5	0.40	94	98	80-120	4
Nickel	mg/L (ppm)	10	0.40	95	99	80-120	4
Zinc	mg/L (ppm)	5	0.08	96	101	80-120	5

Laboratory Code: LCS

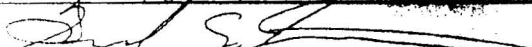
Analyte:	Reporting Units	Spike Level	% Recovery MS MSD		Acceptance Criteria	Relative Percent Difference
Chromium	mg/L (ppm)	5	100	103	80-120	3
Copper	mg/L (ppm)	5	102	105	80-120	3
Nickel	mg/L (ppm)	10	101	104	80-120	3
Zinc	mg/L (ppm)	5	102	104	80-120	2

a - The analyte was detected at a level less than five times the detection limit. The RPD results may not provide reliable information on the variability of the analysis.



AS# 710044

KS AI  
10.9.97  
1 Am

Send Report To: Alaska Copper Work Contact Gerald Thompson  
Company Alaska Copper Work  
Address 6028 HAWAIIAN ST  
City, State, Zip Seattle WA 98134  
Phone # (206) 382-8329 FAX # 206

SITE NO.	PROJECT NAME	PURCHASE ORDER #
7238	metro Self monitor	m58694
SAMPLERS (signature)	PROJECT LOCATION	
	3200 6th Ave S.	
REMARKS	SAMPLE DISPOSAL INFORMATION	
	<input checked="" type="checkbox"/> Dispose after 30 days <input checked="" type="checkbox"/> Return Samples <input checked="" type="checkbox"/> Call for Instructions	

[illegible]

SIGNATURE	PRINT NAME	COMPANY	Date	Time
Relinquished by: 	Gerald Thompson	ACEW	10-9-97	12:46
Received by: 	Mike Koranko	F&B Inc	10-9-97	12:47pm
Relinquished by:				
Received by:				



**FRIEDMAN & BRUYA, INC.**

**ENVIRONMENTAL CHEMISTS**

James E. Bruya, Ph.D.  
Charlene Jensen, M.S.  
Bradley T. Benson, B.S.  
Kurt Johnson, B.S.

3012 16th Avenue West  
Seattle, WA 98119-2029  
TEL: (206) 285-8282  
FAX: (206) 283-5044  
e-mail: fbi@isomedia.com

October 10, 1997

**INVOICE # 97ACU1010-6**  
**DUPLICATE COPY**

Accounts Payable  
Alaskan Copper Works  
628 South Hanford St.  
Seattle, WA 98134

RE: Project Metro Self Monitor, PO# M58694: Results of testing requested by  
Gerry Thompson for material submitted on October 9, 1997.

1 water sample analyzed for  
Chromium, Copper, Nickel, and Zinc  
using Method 6010 @ \$65 per sample

\$ 65.00

Amount Due .....

\$ 65.00

FEDERAL TAX ID #(b) (6)

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October 10, 1997

Gerry Thompson, Project Manager  
Alaskan Copper Works  
628 South Hanford St.  
Seattle, WA 98134

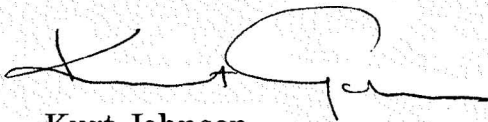
Dear Mr. Thompson:

Included are the results from the testing of material submitted on October 9, 1997 from your Metro Self Monitor, PO# M58694 project. Any samples that may remain are currently scheduled for disposal in 30 days. If you would like us to return your samples or arrange for long term storage at our offices, please contact us as soon as possible.

We appreciate this opportunity to be of service to you and hope you will call if you should have any questions.

Sincerely,

FRIEDMAN & BRUYA, INC.



Kurt Johnson  
Chemist

keh  
Enclosures  
ACU1010R.DOC